

Minutes IEEE P802.3ch Multigig Automotive Ethernet PHY TF AdHoc meeting January 10, 2018

Prepared by George Zimmerman

Proposed Agenda:

1. Agenda/Admin: George Zimmerman, agenda_3chah_01_101817.pdf
2. SG Chair's comments: no presentation (S. Carlson could not attend)
3. Presentations:
 - a. Natalie Wienckowski, GM North America
 - b. STP Cable in Automotive Environment – Taketo Yamada, YAZAKI
4. Discussion & Next steps – All

Presentations were posted to the adhoc webpage the evening before

Agenda/Admin George Zimmerman acting as ad hoc chair:

Meeting began at 7:09am PT.

Introductions & Affiliations.

Presented file: [agenda 3chah 01 011018.pdf](#)

1. Reviewed the Attendance information related to the ad hoc.
2. Displayed the Participation slide and reviewed it.
3. Displayed patent slide deck, and reviewed it.
Call for Patents was made at 7:20AM Pacific Time, none responded
4. Reminded participants to indicate full names and employer/affiliation for the meeting minutes.

Instructions for subscribing to the reflector may be found at <http://www.ieee802.org/3/ch/reflector.html>. If you cannot subscribe to the reflector for some reason, and need additional assistance please contact the Task Force chair.

Confirmation of previous minutes

The ad hoc Chair asked if there was any objection to confirming the previous 3 ad hoc minutes. There was no objection.

Presentations/Discussion:

Chair's Comments & Discussion Steve Carlson, Chair, IEEE P802.3ch Task Force:

With Mr. Carlson not present, Mr. Zimmerman pointed the participants to Mr. Carlson's reminder on the NGAUTO email reflector regarding the upcoming interim, copied below:

Colleagues,

P802.3ch will meet Thursday and Friday in Geneva. Presentation requests are due Thursday, January 11, 2018, with the PDF copy due Thursday, January 18, 2018. Please follow the Procedure for Presenters guidelines here: <http://grouper.ieee.org/groups/802/3/ch/public/presentproc.html>

We are still trying to get enough information for our link segment baseline.

Regards,

Steve

Requests for presentations are due Thursday January 11, and that presenters should get their requests in to the Task Force Chair.

Presentation: Ethernet PHY tradeoffs to consider – Natalie Wienckowski, GM North America [wienckowski 3ch 01 011018.pdf](#)

The presenter reviewed several tradeoffs involved in line code and phy proposal analysis, and requested that proposers of PHY solutions present information on these tradeoffs when proposing PHYs. The tradeoffs involve a variety of parameters which will impact complexity and power consumption, as well as balance of complexity in system components (e.g., cabling vs. electronics). In discussion, a participant asked whether one or multiple PHY solutions could eventually be chosen, and the answer given was that our objectives and CSDs currently state no more than one PHY per data rate.

Presentation: STP (7.5GHz) Link Segment Test Results – Harsh Patel, Mike Gardner, Sasha Babenko – Molex. [\(Patel 3ch 01 01102018.pdf\)](#)

The presenter presented measurements of 26AWG shielded twisted pair medium with plug connectors to 7.5 GHz. This presenter is not able to be present at the upcoming interim in Geneva, so presented at this ad hoc meeting. Smooth performance was seen to 6 GHz, without suckouts. The presenter summarized that limit lines could be derived from the data. The charts presented included insertion loss, return loss, transmitted mode conversion and reflected mode conversion. S-parameter files (such as touchstone format) were requested, the presenter suggested they were still working and those may come at a later time and that he would consider making other, simpler formats (such as excel versions of the graphs presented) available sooner to those wishing to do PHY analysis/proposals.

Closing Business

There will be no more ad hoc meetings prior to the January interim.

Meeting closed –8:10am PT

Attendees (from Webex + emails)

First	Last	Affiliation
Shaziah	A	GM
Sasha	Babenko	Molex
James	Bauer	Marvell
Mark	Bohm	Microchip
Rich	Boyer	Aptiv

David	Brandt	Rockwell Automation
Phil	Brownlee	TDK
Stefan	Buntz	Daimler
Eric	DiBiaso	TE Connectivity
Ramin	Farjad	Aquantia
Matthias	Fritsche	Harting
Mike	Gardner	Molex
Ajeje	Gupta	Ford
Dalibor	Ignjatovic	ACOME
Venkat	Iyer	microchip
Matthias	Jaenecke	Yazaki
Chad	Jones	Cisco
Haysam	Kadry	Ford
Taiji	Kondo	Megachips
David	Law	HPE
Juergen	Mandel	Aptiv
Kirsten	Matheus	BMW
Larry	Matola	Aptiv
Brett	McClellan	Marvell
Waseem	Mir	Aptiv
Philipp	Numberger	MD Elektronik
Josef	Ohni	MD Elektronik
Doug	Oliver	Ford
Sujan	Pandey	NXP
Harsh	Patel	Molex
Eric	Thompson	GM
Natalie	Wienckowski	GM
James	Withey	fluke networks
John	Yurtin	Aptiv
George	Zimmerman	CME Consulting/ADI, APL Group, Aquantia, BMW, Cisco, CommScope
TOTAL	35	Attendees